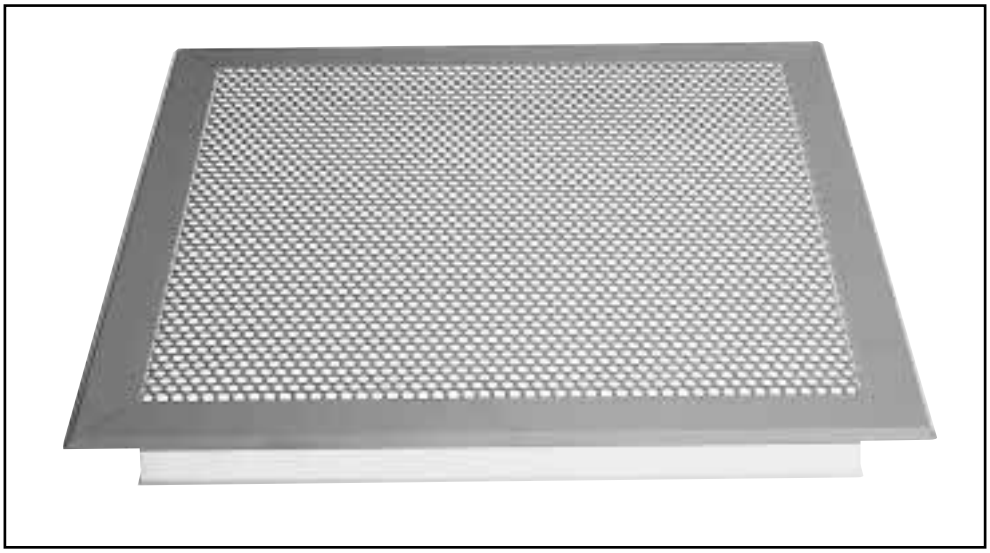
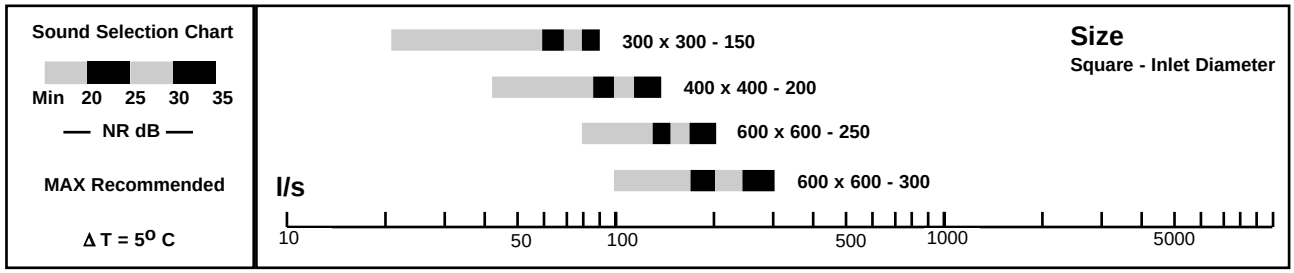
PERFORATED DIFFUSER

2.61
APD



Selection Guide



Ordering procedure
Using the chart below select your requirement and substitute the underscored text below.
Type..**X**..**C** (X is the nominal face size of the diffuser).

Example: If your requirement is for a 400 mm square perforated diffuser with a 200 mm dia inlet, the ordering code would be **APD1608.** {When ordering it is not necessary to include the periods [..]).

Product Size Numbers

"Type"	"X" Size	Inlet dia. "C"									Colour
		06 (150)	08 (200)	10 (250)	12 (300)						
APD	**12** (300)										Powder coat white
	16 (400)										
	24 (600)										
											Special colours

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Description

The 2.61 (APD) perforated diffuser is designed for flush mounting and suspended ceilings.

The diffuser is available in 1,2,3 or 4-way blow configurations.

The perforated face may be removed from the frame for installation and cleaning.

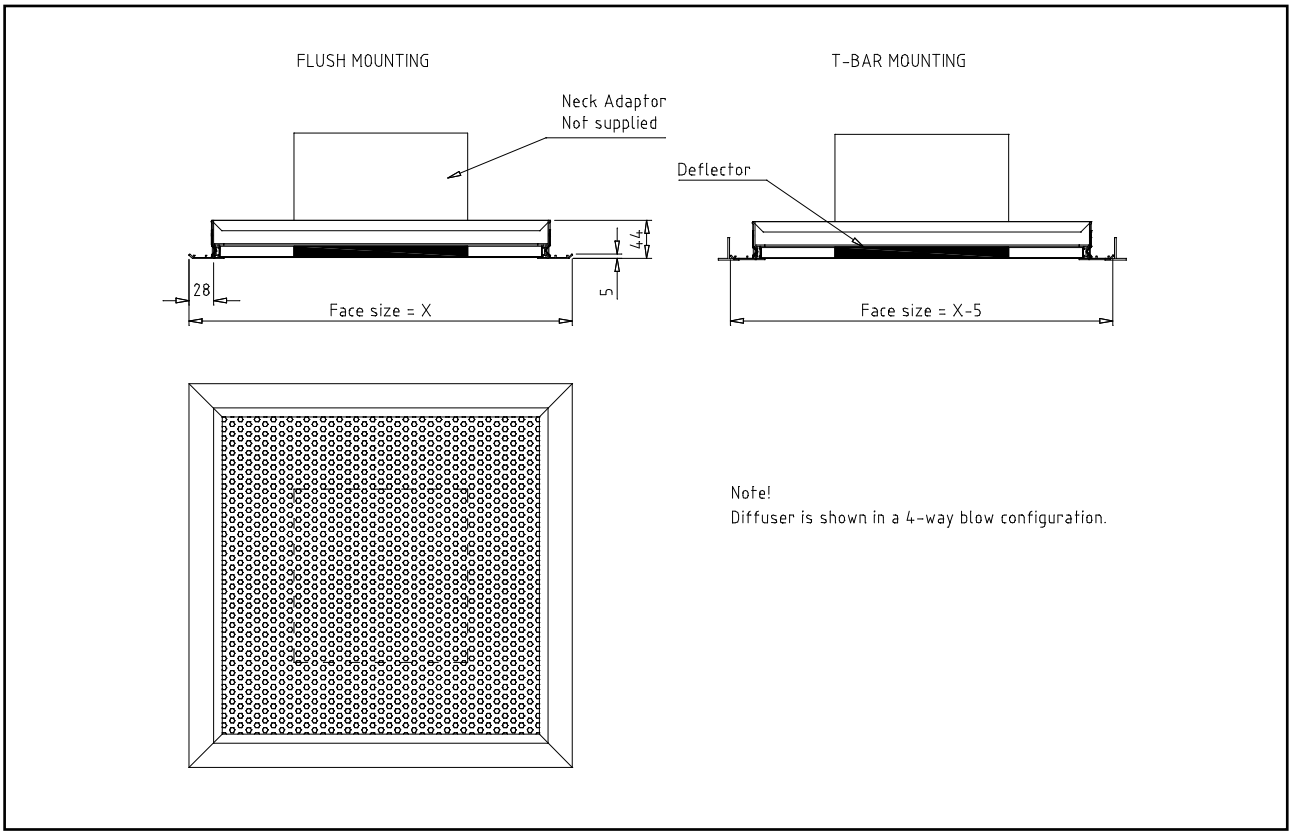
The frames are made from aluminium with a perforated, galvanised core.

Finish

Each diffuser is powdercoated white unless otherwise specified.

There are 15 standard colours to choose from.

Design dimensions



	Size	X Size	Inlet dia.
A	300 x 300 - 125	300	150
B	400 x 400 - 200	400	200
C	600 x 600 - 250	600	250
D	600 x 600 - 300	600	300

Sound data

NR levels for the grille may be determined from the engineering graph.

Sound power level L_W

The generated sound power level L_W dB is calculated by adding the correction factor K_{ok} (see table below) to the sound level NR dB according to the formula:

$$L_W = NR + K_{ok}$$

Size	Frequency (cycles per second) 125	250	500	1000	2000	4000	8000
A	+3	+2	+5	+8	+4	-6	-13
B	+2	+1	+5	+8	+3	-10	-15
C	+2	0	+5	+9	0	-12	-15
D	+2	0	+5	+9	+1	-13	-15
Tol +/-	2	2	2	2	2	2	2

K_{ok} with diffused pattern

Sound absorption ΔL dB

The sound absorption shown relates to a reduction of the sound power level calculated from duct to room. The end reflection is included in the values.

Size	Frequency (cycles per second) 125	250	500	1000	2000	4000	8000
A	13	8	4	3	1	1	0
B	11	6	3	2	1	0	0
C	10	5	2	1	1	0	0
D	8	4	1	1	0	0	0
Tol +/-	2	2	2	2	2	2	2

Air pattern

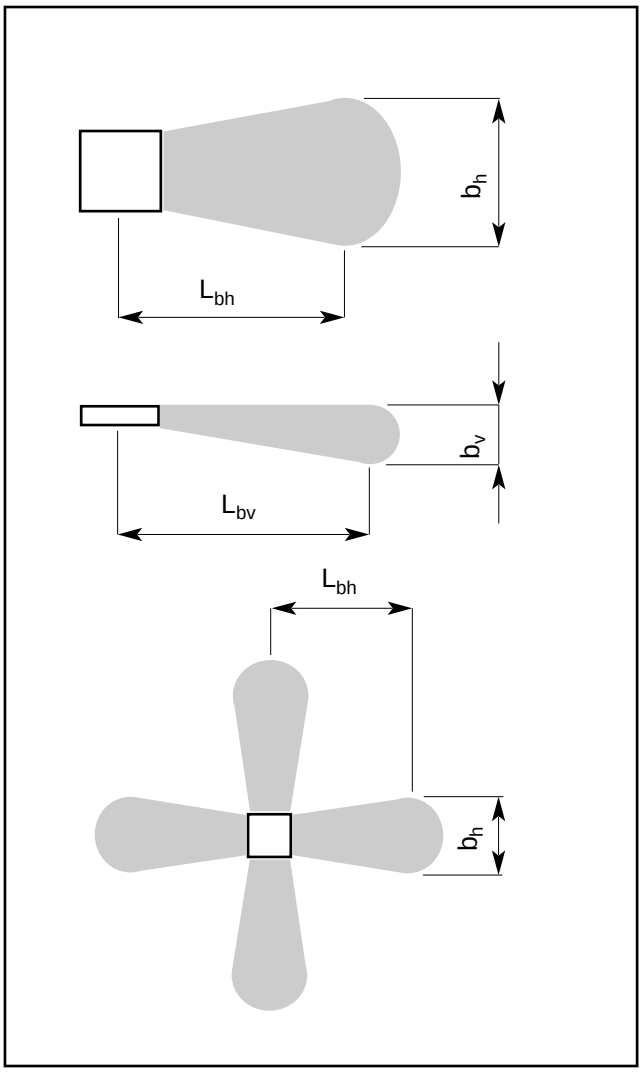
(with isothermal air supply)

$b_h = L_{0.3} \times 0.03$

$L_{bh} = L_{0.3} \times 0.65$

$b_v = L_{0.3} \times 0.06$

$L_{bv} = L_{0.3} \times 0.65$



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Engineering Graphs

Throws shown are to a terminal velocity of 0.60 m/s and 0.30 m/s.

Terminal velocity	Approximate air velocity in room
0.60 m/s 0.30 m/s	0.30 m/s 0.15 m/s

These graphs are for selection only and should not be used for commissioning.

APR 4-way pattern